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EXAMINER
THERIAULT, STEVEN B

ART UNIT	PAPER NUMBER
2179	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	**Applicant(s)**
Office Action Summary	10/648,625	AITA ET AL.
	Examiner	**Art Unit**	
	STEVEN B. THERIAULT	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>28 January 2008</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-21</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-21</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the following communications: Amendment filed 01/28/2007

This action is made Final.

2.   Claims 1 -21 are pending in the case. Claims 1 and 6 are the independent claims. **This office action**

contains two separate art rejections with the second starting on page 11.

Double Patenting

3.   The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees.   A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).
A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.
Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4.   Claims 1 and 6 are rejected on the ground of nonstatutory obviousness-type double patenting as

being unpatentable over claims 1 and 13 of U.S. Patent No. 7,305,623 (hereinafter 623').

Although the conflicting claims are not identical, they are not patentably distinct from each other

because the limitations of the claims and subject matter disclosed as substantially similar. For

example the claims and identical feature mapping are as follows:

Claim1 of present application:

I.(currently amended) A method for provisioning a circuit via a plurality of network elements comprising: (a) graphically representing said network elements within a network as a plurality of network element objects;(b) graphically representing a communications link between two network elements as a bridge object disposed between two of said plurality of network element objects;(c) graphically representing the status of cross-connection links within said network elements as an icon displayed on each of said Linked network element objects; and(d) selecting at least some of wherein said network element objects and bridge objects be manipulated by a user to form a graphical representation of the circuit being provisioned;, wherein said selected network element objects are selected by a user, and comprise a start node, an end node and at least one intermediate node between the start and end nodes.

Claim 1 of 623' application:

1. A method for ░░░░░░░░░░░░░░ between a starting ░░░░░░ element and an ending ░░░░░░ element, comprising: (a) representing ░░░░░ elements within a ░░░░░ as a plurality of area objects, each area object including a plurality of the ░░░░░ elements; (b) representing communications links between two area objects as a bridge object, each bridge object having at least one communications link between any of the plurality of ░░░░░ elements in a first of the two area objects and any of the plurality of ░░░░ elements in a second of the two area objects, each communications link comprising at least one communications channel; (c) iteratively performing the following tasks using the area objects and bridge objects until selections enabling the ░░░░░░░░░░░░░░░░ are made: (c1) expanding a selected area object to display the corresponding plurality of ░░░░░ elements and selecting at least one of the displayed ░░░░░ elements; (c2) expanding a selected bridge to display the corresponding at least one communications link and selecting at least one of the displayed communications links; (c3) highlighting each selected ░░░░░ element, communications link and communications channel; (d) adding each selected area object and each selected bridge object to an area submap and adding each selected ░░░░░ element and each selected communication link to a node submap, said area submap and said node submap being used to generate respective first and second images in a graphical ░░░ ░░░░░░ (GUI).

Claim 6 of present application:

6.(currently amended) A graphical user interface (GUI) <u>for use in provisioning a circuit</u> comprising: a plurality of network element objects, each network element object representing a respective element within a network and having a status icon associated with the network element object; a plurality of bridge objects, representing a respective communications channel within the network; wherein: in response to a user selection of [a] <u>at least some</u> network element object the network elements corresponding to the selected network is selected for use in provisioning [a] the circuit; and its each corresponding status icon displays information as to the status of a communications channel ~~~associated with the <u>respective</u> selected network element and <u>wherein said selected network elements comprise a start node. an end node and at least one intermediate node between the start and end nodes.</u>

Claim 13 of 623' application:

13. A graphical ░░░░ ░░░░░░░ (GUI), comprising: a plurality of area objects, each area object comprising a plurality of ░░░░░ element objects, each ░░░░░ element object representing a respective element within a ░░░░░; a plurality of bridge objects, each bridge object comprising at least one communications link object between any of the plurality of ░░░░░ element objects in a first of the two area objects and any of the plurality of ░░░░░ element objects in a second of the two area objects, each communications link object comprising at least one channel object, each channel object representing a respective communications channel within the ░░░░░; wherein: in response to a user selection of an area object, the selected area object is expanded to graphically represent its constituent ░░░░░ element objects and an instance of the selected area object is generated for use in an area submap; in response to a user selection of a bridge object, the selected bridge object Is expanded to graphically represent its constituent communications link objects and an instance of the selected bridge object is generated for use in an area submap; in response to a user selection of a ░░░░░ element object the ░░░░░ element corresponding to the selected ░░░░░ object is selected for use in a circuit and an instance of the selected ░░░░░ element object is generated for use in a node submap; in

response to a user selection of a communications link object, the selected communications link object is expanded to graphically represent its constituent channel objects and an instance of the selected communications link object is generated for use in a node submap; in response to a user selection of a channel object, the channel corresponding to the selected ▨▨▨▨ object is selected for use in a circuit; adding each area object instance and each bridge object instance to said area submap, said area submap being used to generate a first image in said GUI; and adding each ▨▨▨▨ element object instance and each communications link object instance to said node submap, said node submap being used to generate a second image in said GUI.

In comparing the sets of claims it is clearly evident that both sets of claims deal with provisioning a circuit. In comparing claim 1 of both applications the first two limitations contain a similar scope and structure of graphically representing network elements in a GUI and showing the communications links between the connected elements on the network. Both claims deal with bridge connections and displaying a set of nodes of a submap that can comprise several network elements. Claim 1 of the 623' application does not recite the display of status information but the disclosure states that link breakage or circuit breakage and restoration is shown graphically in the interface, where the communications links in the 623' represents graphically a channel object that can show status and therefore the first set of claims appear to be substantially similar in scope. In comparing claims 6 and 13, represent the graphical user interface that provides the user a metaphor to provision the network and contain substantially similar subject matter as claim 1 of both applications. The obvious variation to one of ordinary skill in the art at the time of the filing of the invention in claims 1 and 6 of the present application, is to provide the icons on the map of the 623' application with the ability to convey information to the user regarding the connection or communication link that is graphically represented as breaking and being restored as shown in the 623' patent. Further, the present application claims the provisioning of a start node and an end node with an intermediate in between as is disclosed in the 623' (see column 4, lines 40-67).

While the claims appear to have different features, as the patent claims to 623' are narrow and contain more limitations, nonetheless the scope of both claims overlap and do not appear to be distinct and therefore the obvious double patenting rejection is determined to be proper.

Claim Rejections - 35 USC § 102

3.   **The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the**

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

 (e) the invention was described in (1) an application for patent, published under section 122(b),

by another filed in the United States before the invention by the applicant for patent or (2) a

patent granted on an application for patent by another filed in the United States before the

invention by the applicant for patent, except that an international application filed under the treaty

defined in section 351(a) shall have the effects for purposes of this subsection of an application

filed in the United States only if the international application designated the United States and

was published under Article 21(2) of such treaty in the English language.

4.   **Claims 1-2, 5-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Despotidis et al.**

(hereinafter Despotidis) U.S. Patent No. 7,305,623 issued Dec. 4, 2007 and filed Dec. 3,

2001.

The applied reference has a common assignee but a different inventive entity and one inventor in

common with the instant application. Based upon the earlier effective U.S. filing date of the

reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e)

might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not

claimed in the reference was derived from the inventor of this application and is thus not the

invention "by another," or by an appropriate showing under 37 CFR 1.131.

In regard to **Independent claim 1,** Despotidis teaches a method for provisioning a circuit via a

plurality of network elements comprising:

(a) graphically representing said network elements within a network as a plurality of network

element objects (See Figure 5, as network elements are graphically displayed).

(b) graphically representing a communications link between two network elements as a bridge

object disposed between two of said plurality of network element objects (See Fig. 5 cont), that

shows communications links between nodes and See column 7, lines 30-50)

(c) graphically representing the status of cross-connection links within said network elements as

an icon displayed on each of said Linked network element objects(See column 4, lines 25-67)

and

(d) selecting at least some of wherein said network element objects and bridge objects ~~racy be~~

~~manipulated by a user~~ to form a graphical representation of the circuit being provisioned; wherein

said selected network element objects are selected by a user, and comprise a start node, an end

node and at least one intermediate node between the start and end nodes(See column 2, lines

32-47 and column 4, lines 25-67 and column 7, lines 30-67). Despotidis expressly teaches

connecting network elements from a start node and an end node.

With respect to **dependent claim 2,** Despotidis teaches a method wherein the icon is selected

from the group consisting a set of colors, a set of images, shapes, symbols, objects, and text

(See Figure 3-5 and 10). Despotidis teaches a network element is shown a square and an area is

shown as a circle. The square with dots in it represents the higher level area depictions and

circles with agg. in them show aggregate areas. Therefore, the interfaces of Despotidis are

shown to have icons with shapes.

With respect to **dependent claim 5,** Despotidis teaches a method wherein each bridge object

has at least one communications link, each communications link comprising at least one channel

for establishing a communication path between two of the plurality of network elements (See

column 4, lines 20-67).

With respect to **Independent claim 6,** Despotidis teaches a graphical user interface (GUI) for use

in provisioning a circuit comprising:

- A plurality of network element objects, each network element object representing a respective element within a network and having a stems icon associated with the network element object (See Figure 5, as network elements are graphically displayed).

- A plurality of bridge objects, representing a respective communications channel within the network (See Fig. 5 cont), that shows communications links between nodes and See column 7, lines 30-50) Despotidis shows bridge connection B4 between elements on a network (See figure 10). B3 connection is also a bridge therefore b3 and b4 represent a plurality of bridge objects.

- Wherein: in response to a user selection of [a] at least some network element object the network elements corresponding to the selected network objects are selected for use in provisioning the circuit; and each corresponding status icon displays information as to the status of a communications channel associated with the respective selected network element (See column 4, lines 25-67) Wherein said selected network elements comprise a start node. an end node and at least one intermediate node between the start and end nodes(See column 2, lines 32-47 and column 4, lines 25-67 and column 7, lines 30-67). Despotidis expressly teaches connecting network elements from a start node and an end node.

With respect to **dependent claim 7,** Despotidis teaches a GUI wherein each bridge object further comprises at least one communications link object, each communications link object comprising at least one channel object, each channel object representing the communization channel (See column 4, lines 25-40 and column 6, lines 1-12).

With respect to **dependent claim 8,** Despotidis teaches a GU wherein the status icon is selected from the group consisting of colors, shapes, symbols, objects and text (See Figure 3-5 and 10).

Despotidis teaches a network element is shown a square and an area is shown as a circle. The

square with dots in it represents the higher level area depictions and circles with gag. in them

show aggregate areas. Therefore, the interfaces of Despotidis are shown to have icons with

shapes.

<div align="center">

Claim Rejections - 35 USC § 103

</div>

5.   **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness**

rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as
set forth in section 102 of this title, if the differences between the subject matter sought to be
patented and the prior art are such that the subject matter as a whole would have been obvious
at the time the invention was made to a person having ordinary skill in the art to which said
subject matter pertains. Patentability shall not be negatived by the manner in which the invention
was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966),

that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or
        nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under
35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was
commonly owned at the time any inventions covered therein were made absent any evidence to
the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor
and invention dates of each claim that was not commonly owned at the time a later invention was
made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35
U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6.   **Claim 3-4, 9-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Despotidis**

et al. (hereinafter Despotidis) U.S. Patent No. 7,305,623 issued Dec. 4, 2007 and filed Dec.

3, 2001, in view of Mayo et al. (hereinafter Mayo) U.S. Patent No. 5,751,965 issued May 12, 1998.

With respect to **dependent claims 3-4 and 9-21,** as indicated in the above rejection Despotidis teaches every element of claims 1 and 6.

Despotidis does not expressly teach the method *wherein the icon is a set of colors and each color of said set corresponds to a particular connection state and cross-connection state within each network element and wherein the set of colors consists of a list of seven colors and wherein the colors represent the status of a communications channel* <u>*between any two network elements and*</u> *wherein a first color represents a cross-connection locally in a management system database not yet set to a network element wherein said first color is black and wherein a second color represents an active connection created by craft terminal interface/element management system CIT/EMS and wherein said second color is green and wherein a third color represents a pending communications channel and wherein said third color is gray and wherein a fourth color represents a partial communications channel state and wherein said fourth color is red and wherein a fifth color represents an improper disconnect state of the communications channel and wherein said fifth color is orange and wherein a sixth color represents an "intern to delete" state of the communication channel and wherein said sixth color is magenta.*

However, Mayo teaches a process of displaying a representation of network connections or other relationships between entities. Despotidis clearly shows elements on a network and suggests that connection status is graphically displayed. Mayo teaches a process of graphically displaying network relationships as Icons and where the Icon color and lines connecting the entities indicate a connection status. Regarding the color limitations, Mayo suggests and shows in figure 5 and 6 that connection states can have color relationships. Mayo teaches that the color indicates to the user via a glance as to the connection status (See column 7, lines 35-50). Mayo teaches showing paths between two

network entities and each path having a different color and the color signifies the

respective condition (See column 8, lines 1-60). Mayo teaches a bridge icon, network

icon and link icons each having a color representing their status (See column 10, lines 5-

20). Mayo expressly suggests that a combination of various colors, shading and styles can

be used to show the connections (See column 7, lines 45-50), which would allow for a

color of magenta, black, green or red and can comprise more 7 or more colors. Regarding

the color represents status of cross connect not set, or an active connection or a partial

state or an improper disconnect state or a delete state, Mayo teaches that the network

management system represents the conditions based on data flow and in a active or

partial connection the data flow can be determined and displayed to the user. An

improper disconnect can be shown if data is expected but no data arrives and an other

condition as specified in table 6 can be shown as the delete state, which would ultimately

be determined by the network administrator. Therefore, the skill artisan can recognize

that displaying a status of a connection can be derived by the state of the data flow to and

from a device and in response to a request sent from a network administration tool (See

column 7, lines 5-10). Despotidis and Mayo both show icons, links and communications

to the user in a network display. They both show connection status and they both show

the use of bridge icons.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of

the invention, having the teachings of Mayo and Despotidis in front of them, to modify

the system of Despotidis to reflect colors on the icons, which indicate connection state.

The motivation to combine Mayo and Despotidis comes from the suggestion in Mayo

that it would be highly advantageous to have an interface that has an intelligent color

display that indicates to the user the health of the network, at a glance, especially when

the user may have to look at a network represented by a large number of network

elements (See column 7, lines 35-50).

Second rejection starts here:

Claim Rejections - 35 USC § 102

7.   **The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the**

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

 (e) the invention was described in (1) an application for patent, published under section 122(b),

by another filed in the United States before the invention by the applicant for patent or (2) a

patent granted on an application for patent by another filed in the United States before the

invention by the applicant for patent, except that an international application filed under the treaty

defined in section 351(a) shall have the effects for purposes of this subsection of an application

filed in the United States only if the international application designated the United States and

was published under Article 21(2) of such treaty in the English language.

Claims 1-9, 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Subramanian et

al. (hereinafter Subramanian) U.S. Patent No. 7124368 issued Oct. 17, 2006 and filed Nov.

7, 2001.

In regard to **Independent claim 1,** Subramanian teaches a method for provisioning a circuit via a

plurality of network elements comprising:

- Graphically representing said network elements within a network (See column 16, lines 27-60) Subramanian teaches a GUI that displays a channel map that graphically represent network elements

- Graphically representing a communications link between two network elements as a bridge object disposed between two of said plurality of network element objects (Subramanian column 17, lines 45-57).

- Graphically representing the status of cross-connection links within said network elements as an icon displayed on each of said linked network element objects wherein said network element objects and bridge objects to form a graphical representation of the circuit being provisioned, wherein said selected network element objects are selected by a user, and comprise a start node, an end node and at least on intermediate node between the start and end nodes. (See column 17, lines 1-44 and column 18, lines 1-20 and figure 13). Subramanian shows a connection map that displays a connection from a start node to an end node (east to west) and shows a node in between or an intermediate node 1204 in figure 12). Subramanian teaches the display of links in a network with an icon where circuits are displayed to the user in different ways depending on type. A circuit type can include a cross connect (See column 17, lines 1-35) as they are circuits formed by channels.

With respect to **dependent claim 2,** Subramanian teaches a method wherein the icon is selected from the group consisting of a set of colors, a set of images, shapes symbols objects (See column 17, lines 15-20).

With respect to **dependent claim 3,** Subramanian teaches the method wherein the icon is a set of colors and each color represents a connection state and cross connection state (See column 13, lines 10-30.

With respect to **dependent claim 4,** teaches that the set of colors consist of a list of seven colors (See column 14, lines 10-14 and column 17, lines 20-25.

With respect to **dependent claim 5,** Subramanian teaches the method wherein each bridge object has at least one communications link each communications link comprising at least one channel for establishing a communication path between two of the plurality of network elements (See column 18, lines 20-31)

With respect to **Independent claim 6,** Subramanian teaches a graphical user interface (GUI) <u>for use in provisioning a circuit </u>comprising:

- A plurality of network element objects, each network element object representing a respective element within a network and having a stems icon associated with the network element object (See column 16, lines 27-60) Subramanian teaches a GUI that displays a channel map that graphically represent network elements

- A plurality of bridge objects, representing a respective communications channel within the network (Subramanian column 17, lines 45-57).

- Wherein: in response to a user selection of [a] <u>at least some </u>network element object the network <u>elements </u>corresponding to the selected network objects are selected for use in provisioning the circuit; and each corresponding status icon displays information as to the status of a communications channel associated with the <u>respective selected </u>network element (See column 17, lines 1-44 and column 18, lines 1-20 and figure 13). Subramanian shows a connection map that displays a connection from a start node to an end node (east to west) and shows a node in between or an intermediate node 1204 in figure 12). Subramanian teaches the display of links in a network with an icon where circuits are displayed to the user in different ways depending on type. A circuit type can include a cross connect (See column 17, lines 1-35) as they are circuits formed by channels.

With respect to **dependent claim 7,** Subramanian teaches a GUI wherein each bridge object further comprises at least one communications link object, each communications link object comprising at least one channel object, each channel object representing the communization channel (See column 18, lines 20-31).

With respect to **dependent claim 8,** Subramanian teaches a GUI wherein the status icon is selected from the group consisting of colors, shapes, symbols, objects and text (See column 17, lines 15-20).

With respect to **dependent claim 9,** Subramanian teaches a GUI *wherein the colors represent the status of a communications channel between any two network elements* (See column 17, lines 1-35 and figure 12).

With respect to **dependent claims 12-13,** Subramanian teaches a GUI *wherein a second color represents an active connection created by craft terminal interface/element management system CIT/EMS and wherein said second color is green* (See column 9, lines 20-30 and column 13, lines 10-34).

Claim Rejections - 35 USC § 103

5.   **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966),

that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6.   **Claim 10-11, 14-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over**

Despotidis et al. (hereinafter Despotidis) U.S. Patent No. 7,305,623 issued Dec. 4, 2007 and

filed Dec. 3, 2001, in view of Mayo et al. (hereinafter Mayo) U.S. Patent No. 5,751,965 issued

May 12, 1998.

With respect to **dependent claims 10-11, 14-21,** as indicated in the above rejection

Subramanian teaches every element of claims 9 and 12.

Subramanian expressly teaches colors are used to indicate circuit connections during

provisioning and to indicate to the user that the circuit has an alarm condition and to indicate that

it has been provisioned (See column 13, lines 10-34 and column 17, lines 1-35)

Subramanian does not expressly teach the method w*herein a first color represents a cross-*

connection locally in a management system database not yet set to a network element and

wherein said first color is black and wherein a third color represents a pending communications

channel and wherein said third color is gray and wherein a fourth color represents a partial

communications channel state and wherein said fourth color is red and wherein a fifth color

represents an improper disconnect state of the communications channel and wherein said fifth

color is orange and wherein a sixth color represents an "intern to delete" state of the communication channel and wherein said sixth color is magenta.

However, Mayo teaches a process of displaying a representation of network connections or other relationships between entities. Subramanian clearly shows elements on a network and suggests that connection status is graphically displayed and with colors and are selectable by the user (See figure 12 -13). Mayo teaches a process of graphically displaying network relationships as Icons and where the Icon color and lines connecting the entities indicate a connection status. Regarding the color limitations, Mayo suggests and shows in figure 5 and 6 that connection states can have color relationships. Mayo teaches that the color indicates to the user via a glance as to the connection status (See column 7, lines 35-50). Mayo teaches showing paths between two network entities and each path having a different color and the color signifies the respective condition (See column 8, lines 1-60). Mayo teaches a bridge icon, network icon and link icons each having a color representing their status (See column 10, lines 5-20). Mayo expressly suggests that a combination of various colors, shading and styles can be used to show the connections (See column 7, lines 45-50), which would allow for a color of magenta, black, green or red and can comprise more 7 or more colors. Regarding the color represents status of cross connect not set, or an active connection or a partial state or an improper disconnect state or a delete state, Mayo teaches that the network management system represents the conditions based on data flow and in a active or partial connection the data flow can be determined and displayed to the user. An improper disconnect can be shown if data is expected but no data arrives and an other condition as specified in table 6

can be shown as the delete state, which would ultimately be determined by the network

administrator. Therefore, the skill artisan can recognize that displaying a status of a

connection can be derived by the state of the data flow to and from a device and in

response to a request sent from a network administration tool (See column 7, lines 5-10).

Despotidis and Mayo both show icons, links and communications to the user in a network

display. They both show connection status and they both show the use of bridge icons.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time of

the invention, having the teachings of Mayo and Subramanian in front of them, to modify

the system of Subramanian to reflect colors on the icons, which indicate connection state.

The motivation to combine Mayo and Subramanian comes from the suggestion in Mayo

that it would be highly advantageous to have an interface that has an intelligent color

display that indicates to the user the health of the network, at a glance, especially when

the user may have to look at a network represented by a large number of network

elements (See column 7, lines 35-50).

It is noted that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re *Heck,* 699 F.2d 1331, 1332-33,216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re *Lemelson,* 397 F.2d 1006,1009, 158 USPQ 275, 277 (CCPA 1968)).

Response to Arguments

Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new

ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. Theriault whose telephone number is (571) 272-5867. The examiner can normally be reached on M, W, F 10:00AM - 8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Weilun Lo/

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